great a change in latitude. Hence, although the vegetation of this northern district presents a marked difference when compared with that of the southern; yet the zoology in many respects has, like the general aspect of the landscape, a very uniform character. The specimens were chiefly collected from the Peninsula of Tres Montes, the Chonos Archipelago (from latitude 46° to 43° 30′), Chiloe with the adjoining islets, and Valdivia. The contrast between the physical conditions and productions of the East and West coasts of this part of South America is very remarkable. On one side of the Cordillera, great heavy clouds are driven along by the western gales in unbroken sheets, and the indented land is clothed with thick forests; whilst on the other side of this great range, a bright sky, with a clear and dry atmosphere, extends over wide and desolate plains.

Chile in the neighbourhood of Concepcion (latitude 36° 42′ S.) may be called a fertile land; for it is diversified with fine woods, pasturage, and cultivated fields. But towards the more central districts (near Valparaiso and Santiago) although by the aid of irrigation, the soil in the valleys yields a most abundant return, yet the appearance of the hills, thinly scattered with various kinds of bushes and cylindrical Opuntias, bespeaks an arid climate. In winter, rain is copious, but during a long summer of from six to eight months, a shower never moistens the parched soil. The country has a very alpine character, and is traversed by several chains of mountains extending parallel to the Andes. These ranges include between them level basins, which appear once to have formed the beds of ancient channels and bays, such as those now intersecting the land further to the south. North of the neighbourhood of Valparaiso, the climate rapidly becomes more and more arid, and the land in proportion desert. Beyond the valley of Coquimbo (latitude 30°.) it is scarcely habitable, excepting in the valleys of Guasco, Copiapó, and Paposa, which owe their entire fertility to the system of irrigation, invented by the aboriginal Indians and followed by the Spanish colonists. Northward of these places, the absolute desert of Atacama forms a complete barrier, and eastward, the snow-clad chain of the Cordillera separates the Zoological province of Chile, from that of the wide plains which extend on the other side of the Andes.

The last district which it is at all necessary for me to mention here, is that

of the Galapagos Archipelago, situated under the Equator, and between five and six hundred miles West of the coast of America. These islands are entirely volcanic in their composition; and on two of them the volcanic forces have within late years been seen in activity. There are five principal islands, and several smaller ones: they cover a space of 2° 10′ in latitude, and 2° 35′ in longitude. The climate, for an equatorial region, is far from being excessively hot: it is extremely dry; and although the sky is often clouded, rain seldom falls, excepting during one short season, and then its quantity is variable. Hence, in the lower part of these islands, even the more ancient streams of lava (the recent ones still remaining naked and glossy) are clothed only with thin and nearly leafless bushes. At an elevation of 1200 feet, and upwards, the land receives the moisture condensed from the clouds, which are drifted by the trade wind over this part of the ocean at an inconsiderable height. In consequence of this, the upper and central part of each island supports a green and thriving vegetation; but from some cause, not very easily explained, it is much less frequented, than the lower and rocky districts are, by the feathered inhabitants of this archipelago.

By a reference to the localities here described, it is hoped that the reader will obtain some general idea of the nature of the different countries inhabited by the several animals, which will be described in the following sheets.

The vertebrate animals in my collection have been presented to the following museums: — the Mammalia and Birds to the Zoological Society; the Fishes to the Cambridge Philosophical Society; and the Reptiles, when described, will be deposited in the British Museum. For the care and preservation of all these and other specimens, during the long interval of time between their arrival in this country and my return, I am deeply indebted to the kindness of the Rev. Professor Henslow of Cambridge. With respect to the gentlemen, who have undertaken the several departments of this publication, I hope they will permit me here to express the great personal obligation which I feel towards them, and likewise my admiration at the disinterested zeal which has induced them thus to bestow their time and talents for the good of Science.